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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,210	03/26/2004	Hitoshi Onishi	9281-4790	8662

7590 11/16/2005

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EXAMINER

JONES, STEPHEN E

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,210

Applicant(s)

ONISHI, HITOSHI

Examiner

Stephen E. Jones

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in the reply filed on 9/12/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Accordingly, Claims 9-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/12/05.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makino et al. (US 6,469,588 cited by applicant) in view of Applicants admitted prior art (AAPA).

Makino teaches a circulator including: a magnet (6); a ferrite plate magnetic assembly(5) having a common electrode on the bottom of the plate and central conductors overlapping on the top; terminals are at the ends of the conductors; the enclosure includes a top yoke part (10) having folded sides (e.g. see Fig. 2C) and

terminals in the contour of a bottom yoke part (e.g. 2a in Fig. 1); the bottom yoke part also has cutouts (Fig. 2B) that have a width larger than the depth; the direction of the cutouts is the same as the sidewall surfaces as seen in Figs 2C and 2B; the terminals are integrated with a resin casing part (1) and the bottom yoke (e.g. see Col. 3, lines 1-5) (Claim 2); the terminals have a portion in the direction of the width of the cutout and a portion bent in the sidewall (e.g. see Fig. 2B and 2C) (Claims 3-4); and the device is used in a communication device (e.g. see Col. 1, line 9).

However, Makino does not explicitly teach that the device has a long side of the enclosure of 3.5mm or less.

Applicant's admitted prior art teaches that the long side can be 3.5mm or less as related to Makino (e.g. see page 2, paragraph 2, of the present specification).

It would have been considered obvious to one of ordinary skill in the art to have made the device of Makino to have a long side of 3.5mm or less such as suggested by AAPA, because it would have been considered a mere optimization of the size to obtain as small a device as possible which would provide the advantageous benefit of requiring less circuit real estate which is a well-known goal in the nonreciprocal device art.

5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makino et al. (US 6,469,588 cited by applicant) and Applicants admitted prior art (AAPA) in view of Hasegawa (US 6,724,275).

Makino and AAPA teach a circulator as described above. However, the combination does not explicitly teach the terminals are coated with an anti-corrosion layer.

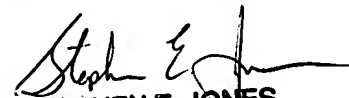
Hasegawa teaches providing a layer of plated silver on terminals of a circulator.

It would have been considered obvious to one of ordinary skill in the art to have plated the terminals of the combination of Makino and AAPA with silver such as taught by Hasegawa, because it would have provided the advantageous benefit of reducing insertion loss and easy solder, such as suggested by Hasegawa (see Col. 4, lines 43-48). Also note that silver is the same material as the present invention thus inherently the silver of Hasegawa would provide anti-corrosion benefits in the same manner as the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


STEPHEN E. JONES
PRIMARY EXAMINER

SEJ